Claims

1.   A method of operating a system including two or more search providers and a user interface having a first input region and a second input region, the method comprising:

receiving information regarding one or more query properties from one or more of the search providers;

configuring at least a portion of the second input region of the user interface based on one or more of the received query properties;

receiving user input through the user interface to define a query;

parsing the query to define a parse tree;

passing the parse tree to at least one of the search providers;

transforming the parse tree based on query properties of one of the search providers; and

conducting a search based on the transformed parse tree.

2.   The method of claim 1, wherein receiving information regarding one or more query properties comprises receiving information regarding one or data object properties; one or more comparison operators, and one or more operands for each of the one or more comparison operators.

3.   The method of claim 1, wherein configuring at least a portion of the second input region of the user interface based on one or more of the received query properties comprises defining and displaying one or more input fields for one or more of the received properties.

4.   The method of claim 1, wherein passing the parse tree to at least one of the search providers comprises passing the parse tree by value to one of the search providers.

5.   The method of claim 1 further comprising electronically transferring at least a portion of the query to one or more other users.

6.   The method of claim 1, further comprising copying at least a portion of the query to a

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repository for use by other users.

7.   A system comprising:

a graphical user interface having a first input region and a second input region for defining a query;

two or more search providers;

means for receiving information indicating one or more query properties from one or more of the search providers;

means for configuring at least a portion of the second input region of the user interface based on one or more of the received query properties;

means for receiving user input through the user interface to define a query after reconfiguring at least a portion of the second input region;

means for parsing the query to define a first parse tree;

means for passing the parse tree to at least one of the search providers;

means for deriving a second parse tree based on query properties of one of the search providers; and

means for searching a database based on the second parse tree.

8.   The system of claim 7, wherein the means for deriving the second parse tree is within one of the two or more search providers.

9.   The system of claim 7, wherein the means for conducting a search based on the transformed parse tree is within one of the two or more search providers.

10.   A method of operating a system including two or more search providers and a user interface, the method comprising:

receiving information regarding one or more query properties from one or more of the search providers; and

configuring at least a portion of the user interface based on one or more of the received query properties.

11. The method of claim 10, wherein receiving information regarding one or more query properties comprises receiving information regarding one or data object properties; one or more comparison operators, and one or more operands for each of the one or more comparison operators.

12. The method of claim 10, wherein configuring at least a portion of the user interface based on one or more of the received query properties comprises defining and displaying one or more input fields for one or more of the received properties.

13. A method of operating a system including two or more search providers and a user interface, the method comprising:
receiving information regarding one or more query properties from one or more of the search
    providers; and
communicating a query based on one or more of the received query properties to one or more of the
    search providers.

14. A method of operating a system including a user interface and one or more search providers, the method comprising:
receiving input through the user interface to define a query;
parsing the query to define a parse tree; and
passing the parse tree to at least one of the search providers.

15. The method of claim 14, wherein passing the parse tree to at least one of the search providers comprises passing the parse tree by value to one of the search providers.

16. A method of operating a system including a user interface and two or more search providers, the method comprising:
passing a parse tree representation of a query to a first one or the search providers;
passing a parse tree representation of the query from the first one of the search providers to a second

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one of the search providers; and

transforming the parse tree representation of the query from the first one of search providers, based on query properties of one of the second one of the search providers.

17.   A method comprising:

receiving a signal indicating invocation of a search or find command;

displaying a first part of a graphical user interface in response to receiving the signal;

receiving information regarding one or more query properties from one or more search providers; and

displaying a second part of the graphical user interface based on the received information regarding the one or more query properties.

18.   A method comprising

obtaining information regarding query definition forms for one or more search providers;

defining a graphical user interface based on the obtained information regarding query definition forms for at least the one search provider.

19.   An extensible search architecture for a computer system, comprising:

means for determining query properties of two or more search providers; and

means for communicating queries based on the determined query properties of the search providers to one or more of the search providers.

20.   An extensible search architecture for a computer system, comprising:

a graphical user interface;

two or more search providers; and

an interface coupled between the two or more search providers and the graphical user interface and adapted to communicate information regarding query definition forms from one or more of the search providers to the graphical user interface or information regarding one or more queries

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from the graphical user interface to the search providers.

21.   A method for providing a unified user interface to two or more search providers, each adapted to search a different data store and each having one or more unique query operators or query-definition fields, the method comprising:

identifying at least the unique query operators and query-definition fields supported by each search provider;

displaying a user interface that allows definition of a query based on one or more of the unique query operators or query-definition fields; and

processing the query by passing information regarding the one or more unique query operators and query-definition fields in the query to at least one of the search providers.

22.   The method of claim 21, wherein identifying at least the unique query operators and query-definition fields supported by each search provider comprises receiving information from each search provider identifying its unique query operators and query definition fields.

23.   The method of claim 21, wherein displaying a user interface that allows definition of a query based on one or more of the unique query operators or query-definition fields comprises displaying the one or more unique query operators or query-definition fields.

24.   The method of claim 21, wherein processing the query by passing information regarding the one or more unique query operators and query-definition fields in the query to at least one of the search providers comprises passing a parse tree based on the query to at least one of the search providers.

25.   A computer readable medium having executable instructions encoded thereon comprising:

a plurality of search providers, each adapted to search at least one data store using a supported set of search operators and a supported set of search fields;

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a configurable user interface having two or more interface elements which allow construction of a query using any of the set of supported search operators and search fields from any of the plurality of search providers; and

a search application program interface between the configurable user interface and the plurality of search providers, the search application program interface adapted to provide information regarding the supported set of search operators and search fields for each of the search providers so that the user interface can be configured to allow access to search operators and search fields supported by any of the plurality of search providers.

26.   The medium of claim 25, wherein one or more portions of the search providers, the user interface, or the search application program interface are implemented in accord with COM..

27.   The medium of claim 25, wherein one or more of the search providers are implemented in an object-oriented programming language.

28.   The medium of claim 25, wherein one or more of the search providers is adapted to search two or more data stores.

29.   The medium of claim 25, wherein the plurality of search providers includes at least three search providers.

30.   The medium of claim 25, wherein the plurality of search providers includes a first search provider for searching bug files, a second search provider for searching link files, and a third search provider for searching software component files.

31. . A method of operating a graphical user interface for defining queries, the method comprising:

receiving user input defining at least a portion of a query, through a table-style interface window; and

displaying a diagrammatic- or keyword-style interface window based on the query.

32. A method of operating a graphical user interface for defining queries, the medium comprising:

displaying a query in a form of a diagram or a table within a first window of the graphical user interface; and

displaying the query in a different form within a second window of the graphical user interface.

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